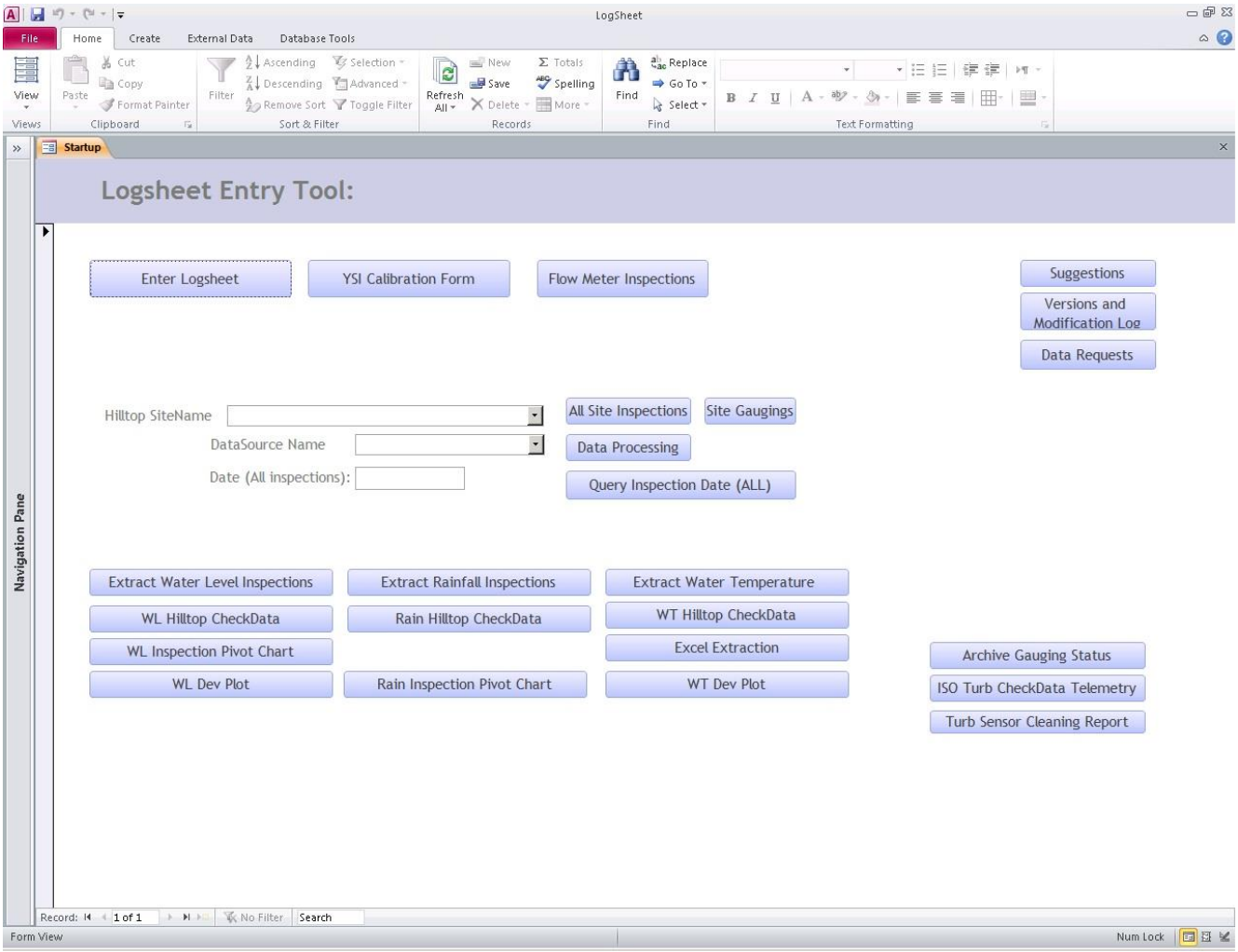
Logsheet Loader SOP

Overview:

This procedure details how to correctly enter information recorded on field sheets during hydrology inspections into the Logsheet Loader.

Getting Started & Basic Information:



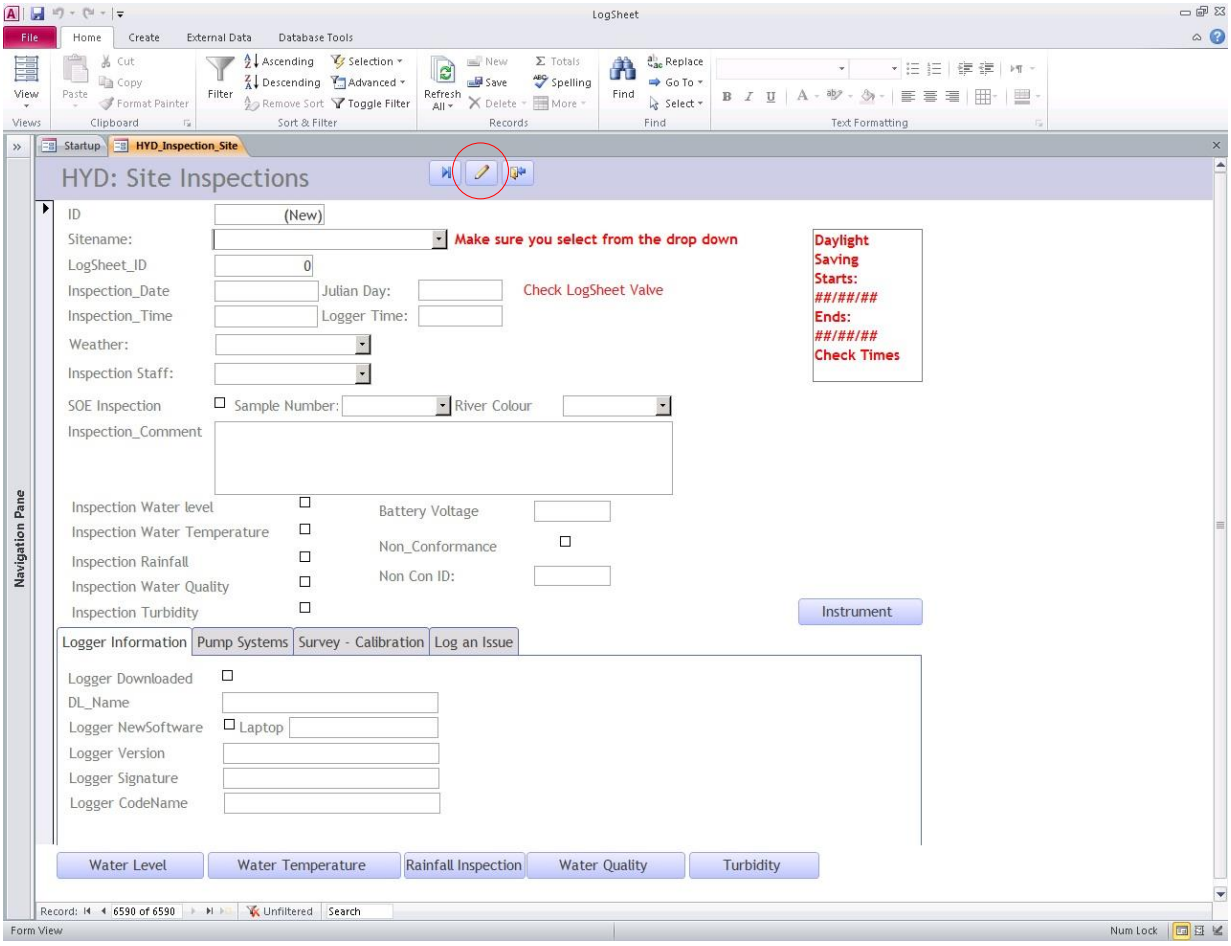
Logsheet Loader Entry Screen

1. Enter the Logsheet Loader.

NOTE: ONLY ONE PERSON CAN BE IN THE LOGSHEET LOADER AT A TIME

The user can also view all the loaded inspections for a site by entering the site name into the 'Hilltop SiteName' drop down menu and clicking 'All Site Inspections' on the main page.

Logsheet Loader SOP



Blank Logsheet Loader Inspection main page. Pencil symbol (circled in red) brings up blank Inspection

2. Click the 'Add Record' button to create a new Site Inspection in the Logsheet Loader. This will bring up a blank Site Inspection form as shown above

When entering the Logsheet Loader it will bring up the first completed Log Sheet form; do NOT overwrite this file

3. Enter the Site Name, Logsheet ID, Inspection Date, Inspection Time, Weather and Staff member who did the inspection into the boxes provided (1-6)

Do NOT type in the Logsheet ID number if the Site Inspection is on an Office chit – Leave blank

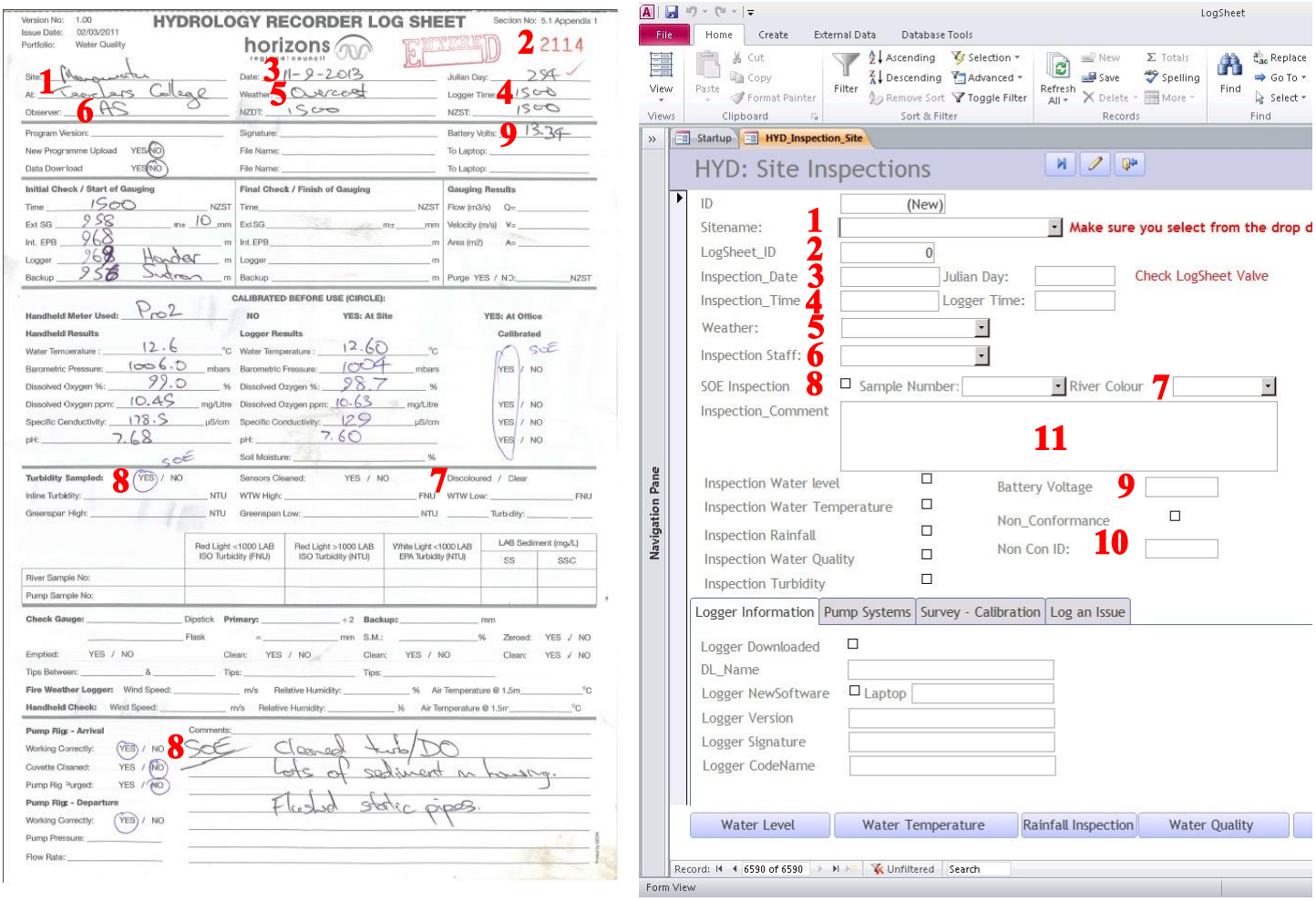
The Julian Day and Logger Time will be automatically generated from the Inspection Date and Inspection Time typed in.

All times are recorded in 24 hour time

MAKE SURE THE JULIAN DAY MATCHES THE VALUE RECORDED ON THE CHIT WITH THE LOGSHEET LOADER GENERATED DAY

Logsheet Loader SOP

If Julian Day matches tick the day on the Inspection Chit – if not inquire with Staff member who conducted inspection on what is correct date/day



Left: Field Inspection Chit (Chit). Right: Blank Logsheet Loader Inspection.

4. If the Inspection is at a site on a river the colour needs to be noted (either Clear or Discoloured [7])
5. If a SOE Inspection is carried out the 'SOE Inspection' tick box needs to be ticked along with the 'Sample Number' box filled out if it is noted on the Chit (8). Not all Field Inspection Forms have a 'SOE Inspection' option to circle so may have noted in the 'Comments' section if a SOE was carried out or if a Turbidity sample was taken. A 'Turbidity' Inspection will also need to be filled out (see Turbidity Inspection Section).
6. If the Battery voltage is noted, it should be entered in the 'Battery Voltage' box (9).

7. If a Non Conformance Report has been associated with an inspection, the 'Non_Conformance' box should be ticked with the NCR number typed in if noted (10).

8. Information that is applicable to the whole site that is recorded on the Chit should be typed into the 'Inspection_Comment' box in the centre of the Logsheet Form (11). This includes but is not limited to: **power issues** (Logger lost power, Mains power failure etc.), **cables/rewiring** (site rewired, loose cables to instruments etc.), **site upgrade** (site moved, new instrumentation installed [specific information recorded in 'Instrumentation' Section] new fencing etc.) **programme change** (include programme name) **damage to site** (vandalism, storm/flood event etc.)

   If unsure where to record information from the Chit into the Logsheet Loader the default is to record it in the 'Inspection_Comment' box – ALWAYS transfer all information recorded on the Chit into the Logsheet Loader

If the Site Inspection was conducted from the Office (i.e. using an Office Chit form) record this in the 'Inspection_Comment' section

Information for 1-6 are required to be filled out for a Hydro inspection; if any of these fields are blank seek the person who completed the inspection to obtain the required information. If the Staff Member is not recorded go to the Co-ordinator of the region the site is situated in to deduce who was at the site during the time of Inspection.

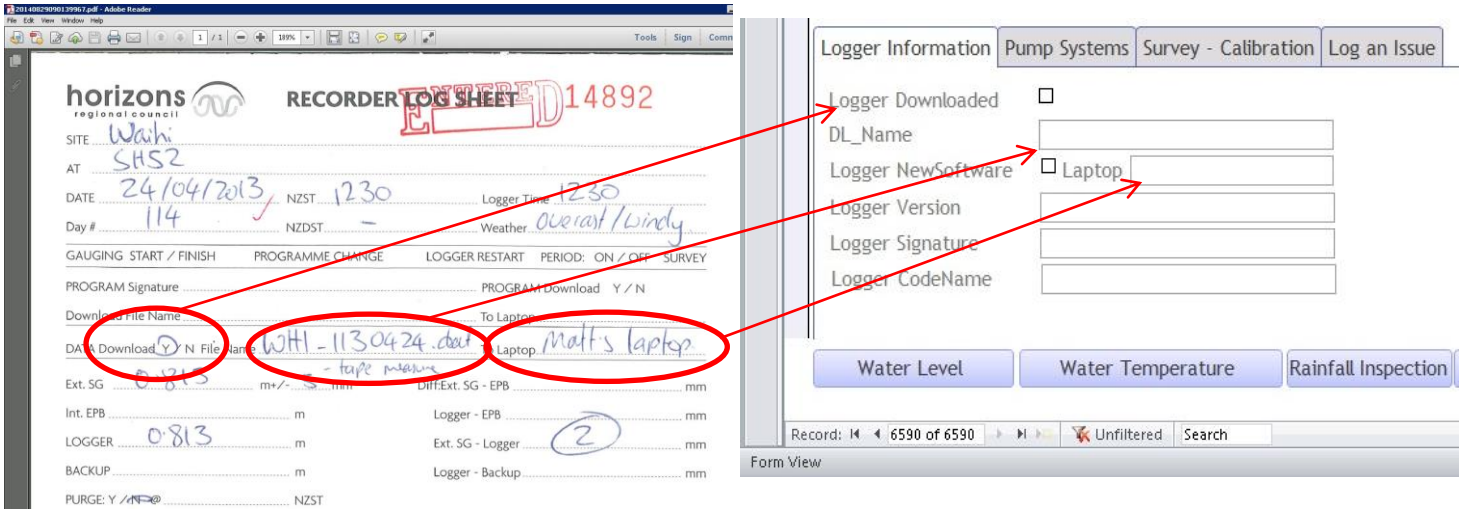
Exception: If a chit is not used it still needs to be entered to make sure no site inspections are lost. In this case type in the 'Inspection_Comment' box CHIT NOT USED – no other fields need to be filled out.

Downloads & Logger Information:

1. Tick the 'Logger Downloaded' box if during the Site Inspection a download was carried out (including if only a partial download was completed). Record in the 'DL_name' box the name of the download. This usually will end in 'xxx.dat' though may only be the site name or TIDEA date. In the 'Laptop' box type whose laptop was used for the download (if noted).
2. If a programme change occurred or new software was loaded tick the 'Logger New Software'.

   If a download and programme change occurred during the same inspection record the new program name in the 'Inspection_Comment' box.

3. Record the Logger Version and Signature in the 'Logger Version' and 'Logger Signature' boxes respectively if recorded on the Field Inspection Chit.



Left: Field Inspection Chit showing Logger download information to be entered into Logsheet Loader Inspection (Right)

Water Level inspection:

1. Select the 'Inspection Water Level' tick box in the Logsheet Loader. This brings up the area where the Water Level Inspection data needs to be recorded.
2. From the Field Inspection Chit enter the Logger time of Water Level Inspection, ESG, +/- error, EPB, Logger and Backup value (if applicable). Tick the box if a purge was carried out along with the time of purge. Tick the box if a gauging was conducted.

If more than one Water Level Inspection was conducted and a Purge was carried out tick the 'Purge' box for the inspection that was done after the event e.g. if two inspections, one at 10:00 and the other at 10:15 with a purge done at 10:10, associate the purge with the 10:15 inspection.

If a Gauging was conducted and the time of the Gauging is not noted on the Field Inspection Chit associate the Gauging with the last inspection carried out.

3. In the 'WL_Comment' Box it is very important to note anything on the Chit that is related to the recording of Water Level at the site. This includes but is not limited to: comments about the **orifice** (dirty, cleaned, broken, raised/lowered etc.), **objects in the river** (vegetation, tree causing blockage, bank slippage upstream/downstream etc.), **ESG condition** (sloping, hard to read, surging water around it etc.), **instrumentation change** (new Sutron, Handar etc.), **compressor** (changed, moved, stopped working, contains water etc.), **surveyed** (if surveyed record Logbook & pg no. used). Also if there is a Backup value recorded it is important to

note what it is (e.g. NIWA value, Handar, Radar). If a gauging was carried out and the Discharge value is written on the chit this is also noted in the comments section (e.g. Q = 3.524 cumecs).

4. Once all the information regarding Water Level on the Chit is entered the 'Load to Hilltop' button needs to be clicked for the information to be loaded to Hilltop. Once successfully loaded to Hilltop the 'Load Check' box will become ticked.

Version No: 1.00
Issue Date: 02/03/2011
Portfolio: Water Quality

HYDROLOGY RECORDER LOG SHEET

Section No: 5.1 Appendix 1

horizons regional council

ENTERED 2114

Site: Manawatu
At: Teachers College
Observer: AS

Date: 11-9-2013
Weather: Overcast
NZDT: 1500

Julian Day: 254
Logger Time: 1500
NZST: 1500

Program Version:
New Programme Upload YES/NO
Data Download YES/NO

Signature:
File Name:
File Name:

Battery Volts: 13.3
To Laptop:
To Laptop:

Initial Check / Start of Gauging

Time 1500 NZST
Ext SG 958 m± 10 mm
Int. EPB 968 m
Logger 968 Hayden m
Backup 958 Sutton m

Final Check / Finish of Gauging

Time NZST
Ext SG m± mm
Int. EPB m
Logger m
Backup m

Gauging Results

Flow (m3/s) Q=
Velocity (m/s) V=
Area (m2) A=

Purge YES / NO: NZST

CALIBRATED BEFORE USE (CIRCLE):

Handheld Meter Used: Pro2

	NO	YES: At Site	YES: At Office
	Handheld Results	**Logger Results**	**Calibrated**
Water Temperature	12.6 °C	12.60 °C	SOE
Barometric Pressure	1006.0 mbars	1004 mbars	YES / NO
Dissolved Oxygen %	99.0 %	98.7 %	
Dissolved Oxygen ppm	10.45 mg/Litre	10.63 mg/Litre	YES / NO
Specific Conductivity	178.5 µS/cm	129 µS/cm	YES / NO
pH	7.68	7.60	YES / NO
	SOE	Soil Moisture: %	

Turbidity Sampled: YES / NO
Inline Turbidity: NTU
Greenspan High: NTU

Sensors Cleaned: YES / NO
WTW High: FNU
Greenspan Low: NTU

Discoloured / Clear
WTW Low: FNU
Turbidity:

	Red Light <1000 LAB ISO Turbidity (FNU)	Red Light >1000 LAB ISO Turbidity (NTU)	White Light <1000 LAB EPA Turbidity (NTU)	LAB Sediment (mg/L) SS	LAB Sediment (mg/L) SSC
River Sample No:					
Pump Sample No:					

Check Gauge: Dipstick **Primary:** ÷2 **Backup:** mm
Flask = mm S.M.: % Zeroed: YES / NO
Emptied: YES / NO Clean: YES / NO Clean: YES / NO Clean: YES / NO
Tips Between: & Tips: Tips:
Fire Weather Logger: Wind Speed: m/s Relative Humidity: % Air Temperature @ 1.5m °C
Handheld Check: Wind Speed: m/s Relative Humidity: % Air Temperature @ 1.5m °C

Pump Rig - Arrival
Working Correctly: YES / NO
Cuvette Cleaned: YES / NO
Pump Rig Purged: YES / NO

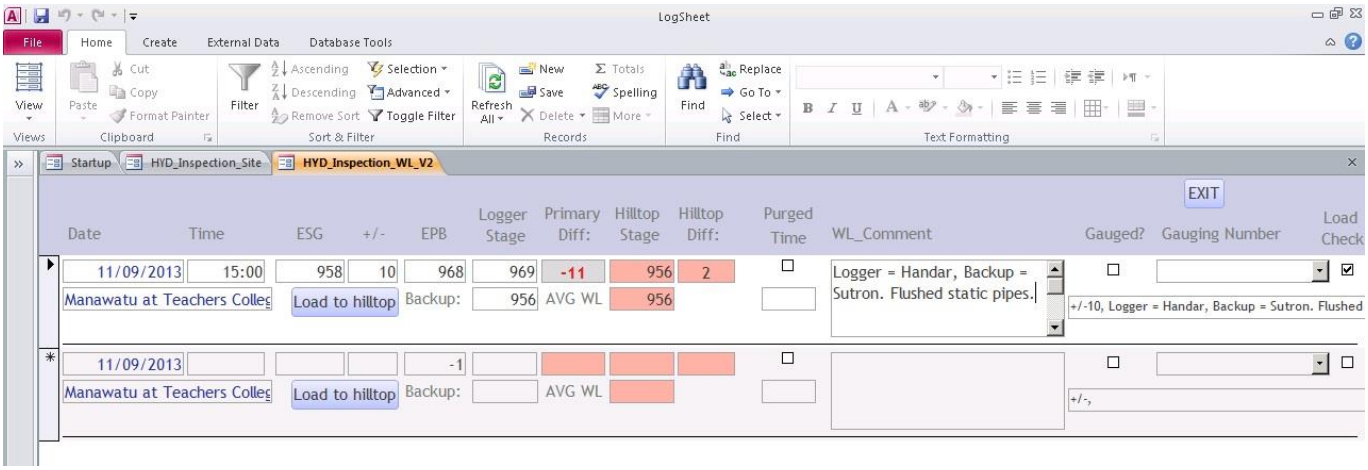
Pump Rig - Departure
Working Correctly: YES / NO
Pump Pressure:
Flow Rate:

Comments:
SOE Cleaned turb/DO
Lots of sediment in housing.
Flushed static pipes.

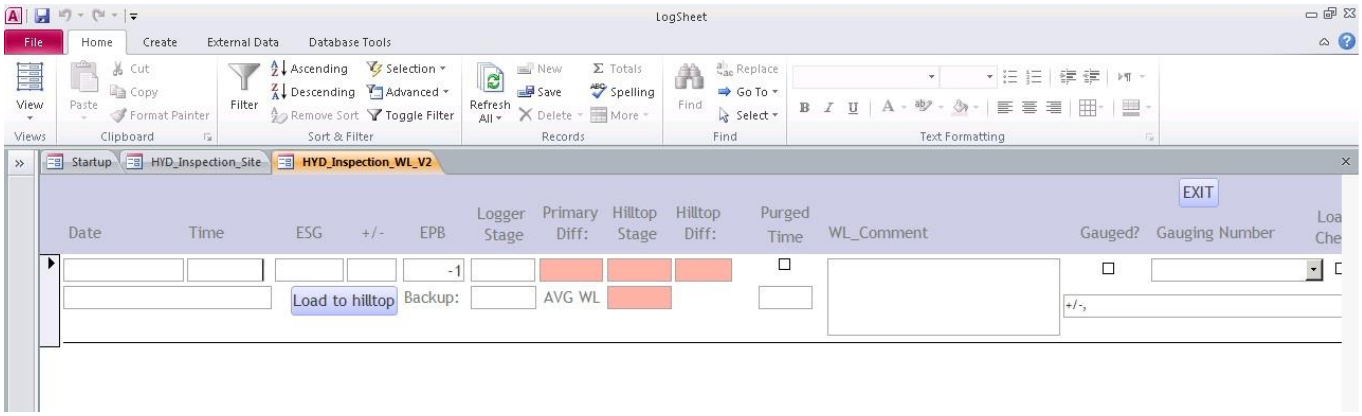
Printed by GDDH

Field Inspection Chit with information needed for a Water Level Inspection circled red.

Logsheet Loader SOP



Field Inspection Chit with information needed for a Water Level Inspection circled red.



Blank Field Inspection Chit with information needed for a Water Level Inspection circled red.

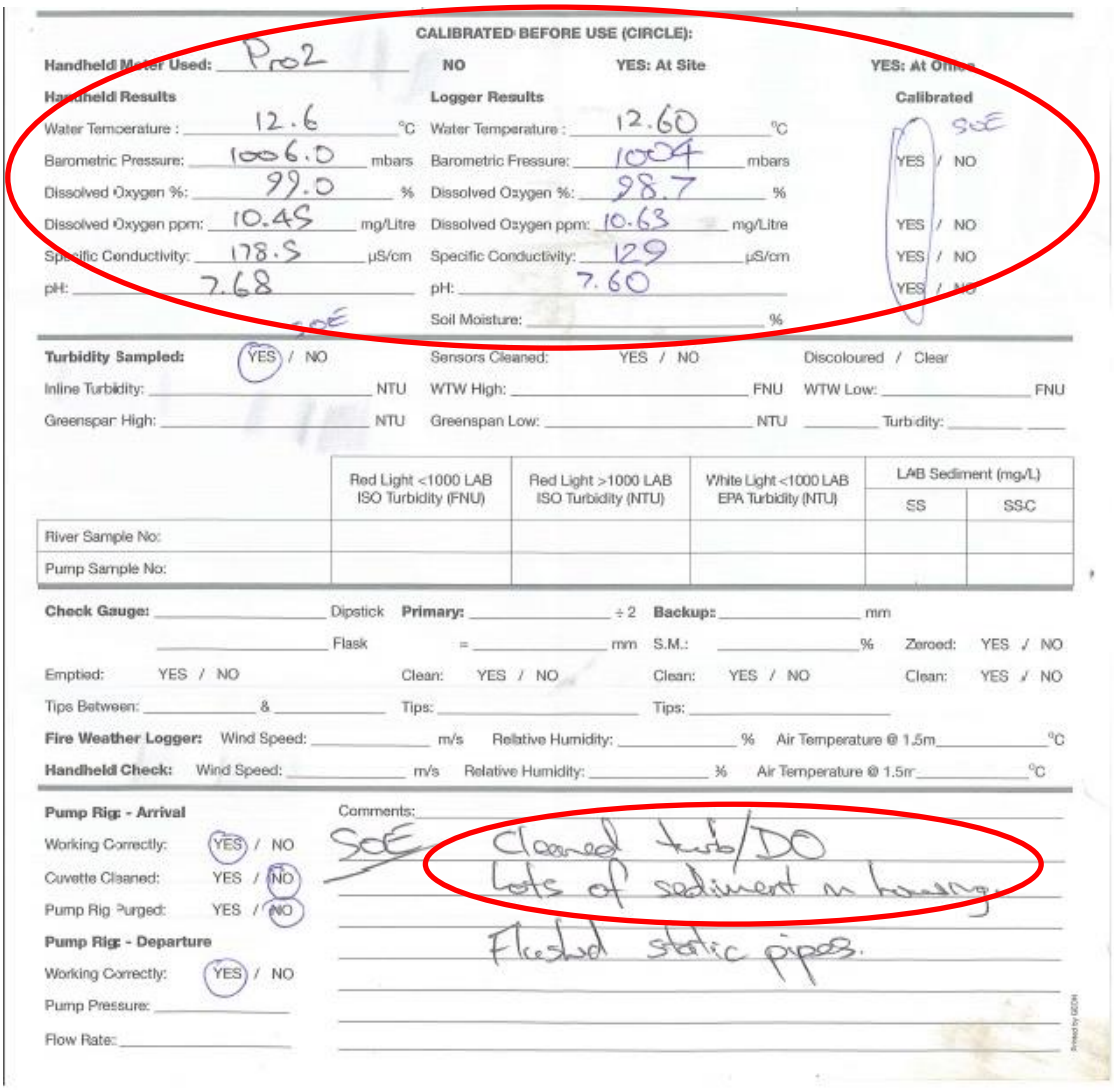
Water Temperature Inspection:

1. Click the 'Inspection Water Temperature' tick box in the Logsheet Loader Form. This will bring up where the Water Temperature information is recorded.
2. The Logsheet Loader will automatically fill in the time that was entered as the initial inspection time for the Field Inspection; if this is incorrect, change the time accordingly.

3. Select the Handheld that was used to measure the Water Temperature **–if this is not noted on the chit return to the person who carried out the inspection**. If it was calibrated select this option from the 'Calibrated' dropdown menu. This should be recorded on the chit. If it is not, select the 'Blank option'. All SOE inspections have the Handhelds calibrated before use.
4. Enter the recorded Handheld Water Temperature value into the 'WT_Check' box and the Logger Water Temperature value in the 'WT_LoggerValue' box; the Hilltop value will automatically generate along with a QC based on the differences between the values
5. In the 'WQ_Comment' box it is very important to record anything noted on the Chit that is relevant to Water Temperature measurements. This box is also shared with the 'Water Quality' information so will show up in both sections of the Logsheet Loader'. This includes but is not limited to: comments on **sensor condition** (blocked, buried under gravels, dirty, damaged etc.), **vegetation** (covered in weeds, logs etc.), **instrumentation** (changed, not working, has been shifted etc.), **location of measurement**.
6. Once completed click the 'Load to Hilltop' button.
7. If another Water Temperature reading was taken click the 'Add record' button (pencil button) to create another entry and repeat above steps.

Water Quality Inspection:

1. Click the 'Inspection Water Quality' tick box in the Logsheet Loader Form. This will bring up where the Water Quality information is recorded.
2. The Water Temperature values, Handheld, Calibration information and comments will already be populated in their fields.
3. If the same handheld was used to record the Water Quality values as the Water Temperature then continue to fill out the boxes associated with those recorded on the Chit (if they occurred at the same time); however if a different handheld was used or they were measured at a different time click the 'Add record' button (pencil button) and fill out the Water Quality sample time, Handheld used and if calibrated.
4. In the 'WQ_Comment' box it is very important record anything noted on the Chit that is relevant to Water Quality measurements. This box is also shared with the 'Water Temperature' information so will show up in both sections of the Logsheet Loader. This includes but is not limited to: comments on **sensor condition** (cleaned, blocked, buried under gravels, dirty, damaged etc.), **vegetation** (covered in weeds, logs etc.), **instrumentation** (changed, not working, has been shifted etc.) **stirred/unstirred values, location of measurement**. . *Stirred value entered into Logsheet Loader, unstirred value entered into Comments Section
5. If another Water Quality reading was taken click the 'Add record' button (pencil button) to create another entry and repeat above steps.



CALIBRATED BEFORE USE (CIRCLE):

Handheld Meter Used: Pro2 NO YES: At Site YES: At Office

Handheld Results		Logger Results		Calibrated
Water Temperature :	12.6 °C	Water Temperature :	12.60 °C	SOE
Barometric Pressure:	1006.0 mbars	Barometric Pressure:	1004 mbars	YES / NO
Dissolved Oxygen %:	99.0 %	Dissolved Oxygen %:	98.7 %	
Dissolved Oxygen ppm:	10.45 mg/Litre	Dissolved Oxygen ppm:	10.63 mg/Litre	YES / NO
Specific Conductivity:	178.5 µS/cm	Specific Conductivity:	129 µS/cm	YES / NO
pH:	7.68	pH:	7.60	YES / NO
	SOE	Soil Moisture:	%	

Turbidity Sampled: (YES) / NO Sensors Cleaned: YES / NO Discoloured / Clear

Inline Turbidity: NTU WTW High: FNU WTW Low: FNU

Greenspan High: NTU Greenspan Low: NTU Turbidity:

	Red Light <1000 LAB ISO Turbidity (FNU)	Red Light >1000 LAB ISO Turbidity (NTU)	White Light <1000 LAB EPA Turbidity (NTU)	LAB Sediment (mg/L) SS	SSC
River Sample No:					
Pump Sample No:					

Check Gauge: Dipstick Primary: ÷ 2 Backup: mm

Flask = mm S.M.: % Zeroed: YES / NO

Emptied: YES / NO Clean: YES / NO Clean: YES / NO Clean: YES / NO

Tips Between: & Tips: Tips:

Fire Weather Logger: Wind Speed: m/s Relative Humidity: % Air Temperature @ 1.5m °C

Handheld Check: Wind Speed: m/s Relative Humidity: % Air Temperature @ 1.5m °C

Pump Rig - Arrival

Working Correctly: (YES) / NO

Cuvette Cleaned: YES / (NO)

Pump Rig Purged: YES / (NO)

Pump Rig - Departure

Working Correctly: (YES) / NO

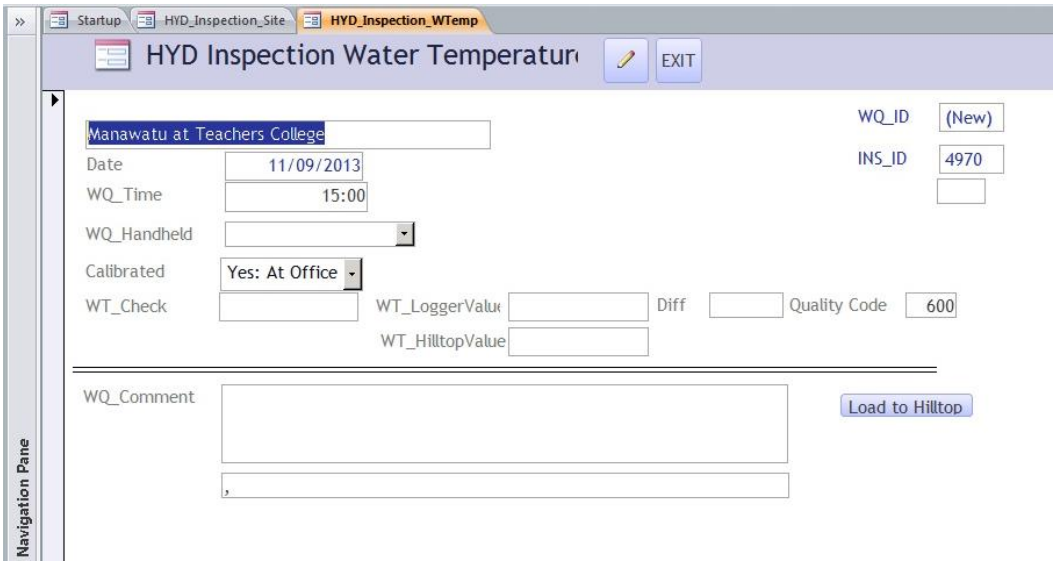
Pump Pressure:

Flow Rate:

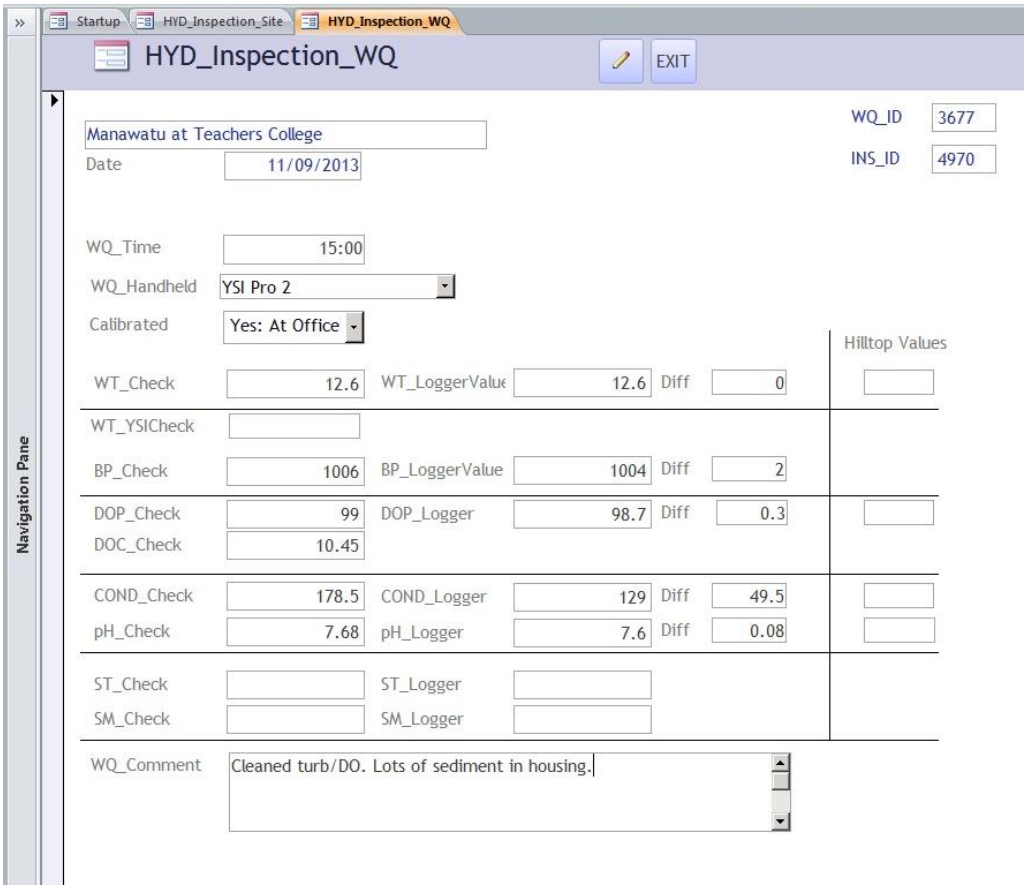
Comments: SOE Cleaned turb/DO Lots of sediment in housing Flushed static pipes.

Field Inspection Chit with Information circled in red for Water Temperature and Water Quality

Logsheet Loader SOP



Blank Logsheet Loader Water Temperature Inspection



Logsheet LoaderWater Quality Inspection completed

Rainfall Inspection:

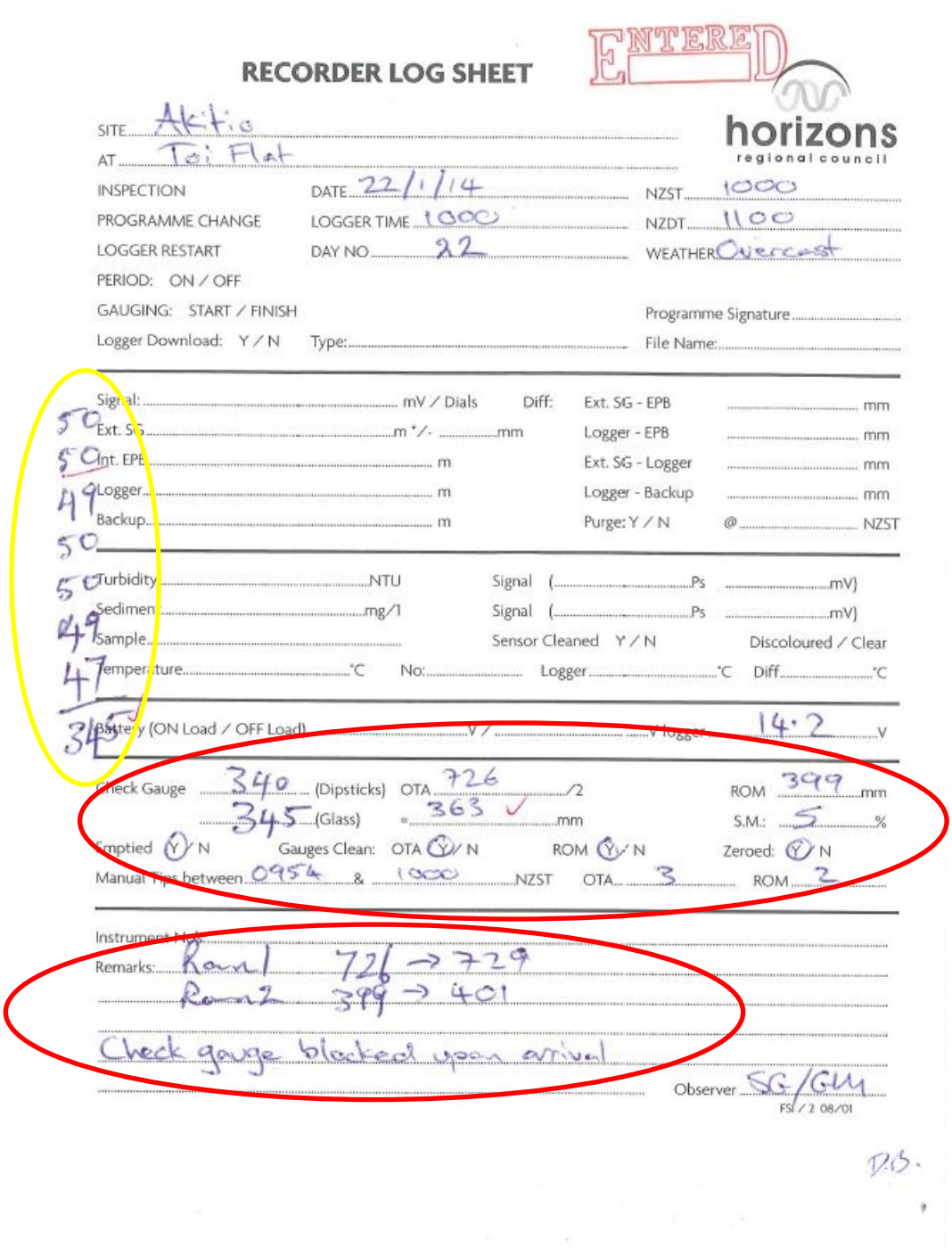
1. Click the 'Inspection Rainfall' tick box in the Logsheet Loader Form. This will bring up where the Rainfall information is recorded.
2. Enter the Dipstick, Glass, OTA and ROM values in the 'Rain Check Dip', 'Rain Check Flask', 'Logger Total (OTA)' and 'Logger Total (ROM)' boxes respectively

Before entering the 'Glass' value tally up the measured rainfall recorded on the chit to make sure it does equal the value the Staff member has recorded on the chit as the 'Check Gauge (Glass)- draw a tick next to the values totalled to confirm the value is correct

Make sure the OTA value recorded on the Chit has been divided by 2 (or multiplied depending on the site) to get the true value e.g. written on chit OTA = 726, /2 = 363 latter value typed in 'Logger Total (OTA)' box - draw a tick next to the values totalled to confirm the value is correct

IF THERE IS NO RAIN CHECK FLASK VALUE AND/OR OTA VALUE ENTERED INTO THE LOGSHEET LOADER IT WILL NOT LOAD TO HILLTOP – In this case type '-1' into these fields to allow it to load

3. If the Rain Gauges were emptied, cleaned and/or zeroed tick the appropriate boxes. If only some of the Rain Gauges were cleaned/emptied and/or zeroed DO NOT tick the box but note down in the 'Rain_Comment' box which ones were.
4. Enter the Manual tips start and end times in the appropriate boxes if any were carried out – Make sure you type 4 values e.g. 0945 not 945.
5. Type in how many manual tips occurred for the OTA and ROM in their respective boxes if any manual tips occurred
6. In the 'Rain_Comment' box it is very important to record anything noted on the Chit that is relevant to Rainfall measurements. This includes but is not limited to: **Rain Gauge condition** (blocked, stopped working, leaking, cleaned etc.), **site work** (weed whacked, sprayed, new weed matting etc.), **validation/calibration** (how many tips, pass/fail etc.), **instrumentation** (changed, broken etc.). Also if the Rain totals were recorded on arrival and leaving these can be noted down.
7. Click in each of the boxes to the right of the screen to generate the statistics (Primary Difference (%) etc.). If the gauges were validated tick the box along with how many tips were measured (if noted on chit) and tick the 'Validation Pass' box if they passed.
8. Click 'Load to Hilltop' once finished.



RECORDER LOG SHEET

ENTERED

horizons regional council

SITE Akitio

AT Toi Flat

INSPECTION DATE 22/1/14 NZST 1000

PROGRAMME CHANGE LOGGER TIME 1000 NZDT 1100

LOGGER RESTART DAY NO 22 WEATHER Overcast

PERIOD: ON / OFF

GAUGING: START / FINISH Programme Signature

Logger Download: Y / N Type: File Name:

Signal: mV / Dials Diff: Ext. SG - EPB mm

50 Ext. SG m +/- mm Logger - EPB mm

50 Int. EPB m Ext. SG - Logger mm

49 Logger m Logger - Backup mm

50 Backup m Purge: Y / N @ NZST

50 Turbidity NTU Signal (Ps mV)

49 Sediment mg/1 Signal (Ps mV)

47 Sample Sensor Cleaned Y / N Discoloured / Clear

345 Temperature °C No: Logger °C Diff °C

Battery (ON Load / OFF Load) V / V 14.2 V

Check Gauge 340 (Dipsticks) OTA 726 /2 ROM 399 mm

345 (Glass) = 363 ✓ mm S.M.: 5 %

Emptied (Y) N Gauges Clean: OTA (Y) N ROM (Y) N Zeroed: (Y) N

Manual Tips between 0954 & 1000 NZST OTA 3 ROM 2

Instrument No:

Remarks: Rain1 726 → 729

Rain2 399 → 401

Check gauge blocked upon arrival

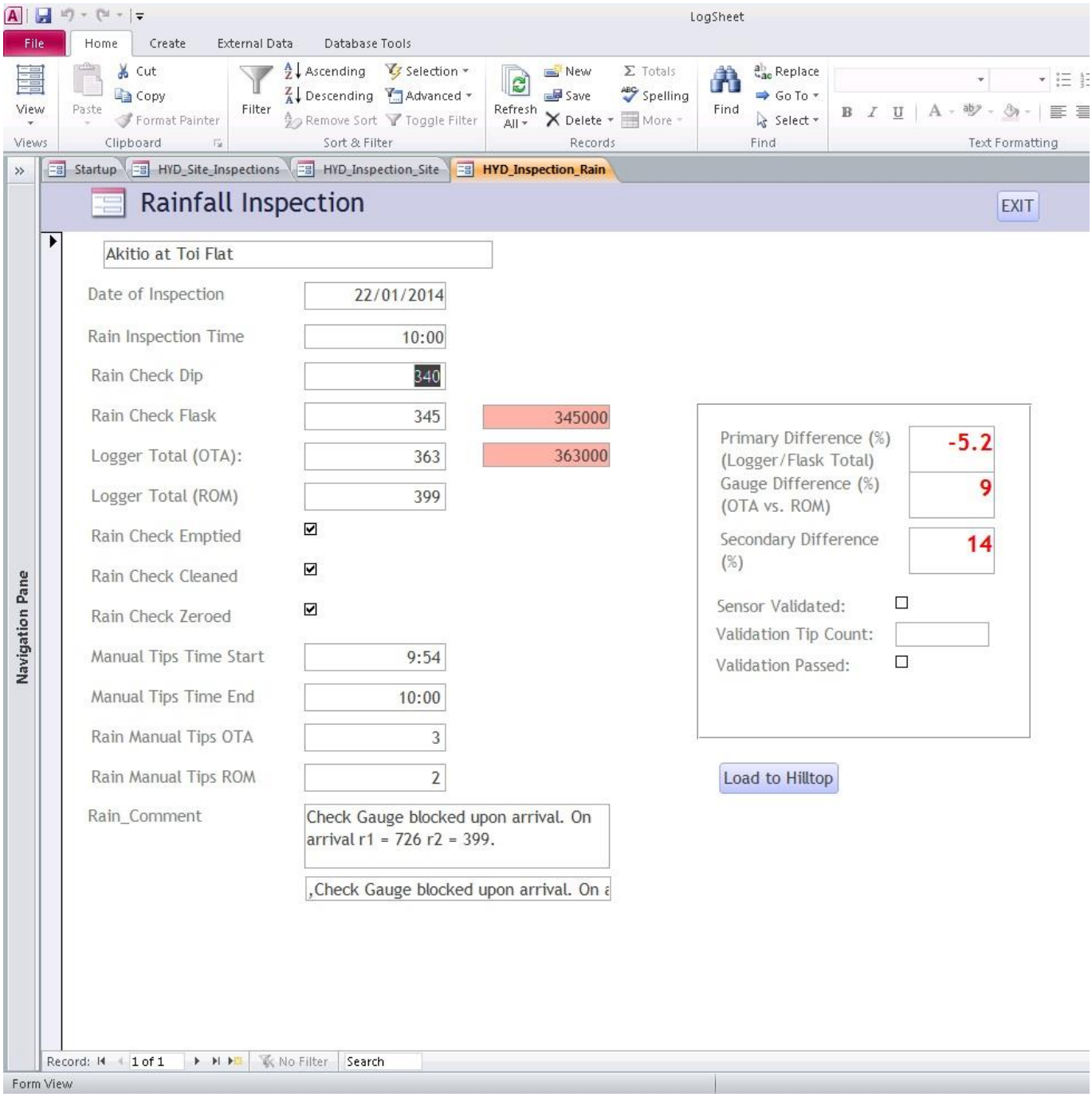
Observer SG/GM

FS / 2 08/01

D.B.

Rainfall Field Inspection Chit with information circled in red needs to be entered into the Logsheet Loader. Information circled in yellow needs to be checked to make sure it equals the recorded Check Gauge Glass but not entered into the Logsheet loader.

Logsheet Loader SOP



Rainfall Logsheet Loader Inspection completed

Turbidity Inspection:

1. Click the 'Inspection Turbidity' tick box in the Logsheet Loader Form. This will bring up where the Turbidity information is recorded.
2. The Turbidity time will be automatically generated from the time entered for the Field Inspection; if this is not correct change it.
3. Tick the 'TURB Sampled' if one was taken. For SOE inspections this needs to be ticked. Type in the sample number if recorded on the chit – if this was already entered when selecting 'SOE Inspection' on the main page of the Logsheet Loader this will automatically appear here along with the River Colour.
4. Tick the 'Turb Cleaned' box if the sensors were cleaned

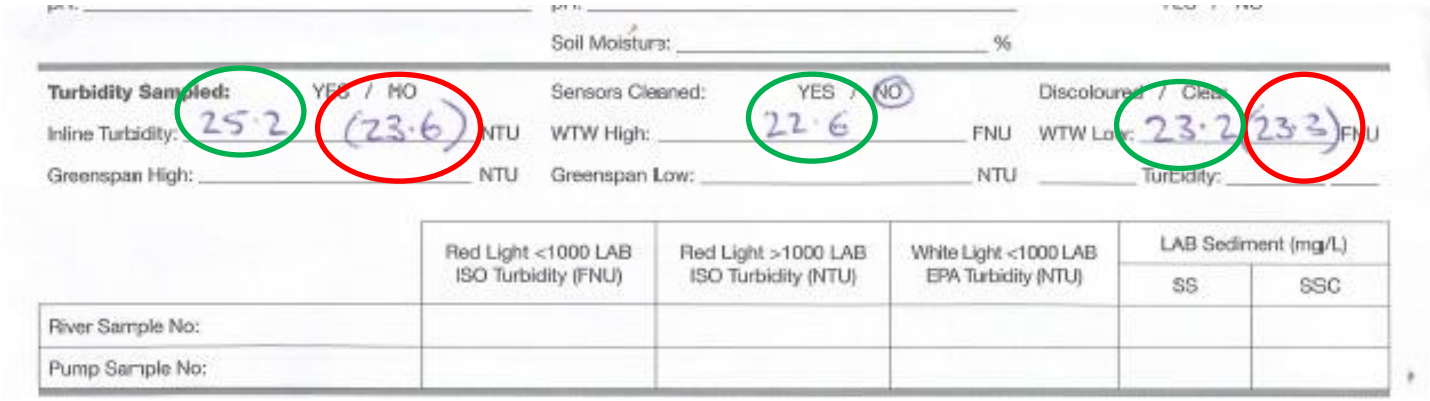
If the sensors were cleaned after the sample was taken do a separate turbidity record; this box should only be ticked if the sensor was cleaned prior/while the sample was taken (note the time in the comments section)

5. Enter the Turb Inline and WTW Controller values written on the chit. These are the screen values recorded at the site and will usually be in brackets ( ) along with the WTW High and WTW Low values. The latter values are NOT typed into the WTW Controller box.

IF THERE IS NO RIVER COLOUR AND/OR WTW CONTROLLER VALUES ENTERED IT WILL NOT LOAD INTO HIILTOP – In this case enter '-1' into appropriate boxes to allow it to load

6. In the 'Turb_Comment' box it is very important to record anything related to Turbidity measurements at the site written on the chit. This includes but is not limited to: **if SOE sample taken**, comments on **sensor condition** (blocked, buried under gravels, dirty, damaged etc.), **vegetation** (covered in weeds, logs etc.), **instrumentation** (changed, not working, has been shifted etc.), **location of measurement, Autosampler information** (autosampler failed etc.). If other sensors are recording at the site (e.g. HACH, Greenspan) record the sensor and its value. If a WTW high, WTW low and Inline Turb value (not in brackets) is noted on the chit record these values as well.
7. Tick the 'Sediment Gauging' box if one was conducted
8. If an Autosampler is operating at the site tick the 'AutoSampler Active' box, enter the Start time, interval per sample and number of bottles per sample in their appropriate boxes.
9. Click 'Load to Hilltop' once complete
10. If another Turbidity reading/sample was taken click the 'Add record' button (pencil button) to create another entry and repeat above steps.

Logsheet Loader SOP



Soil Moisture: _____ %

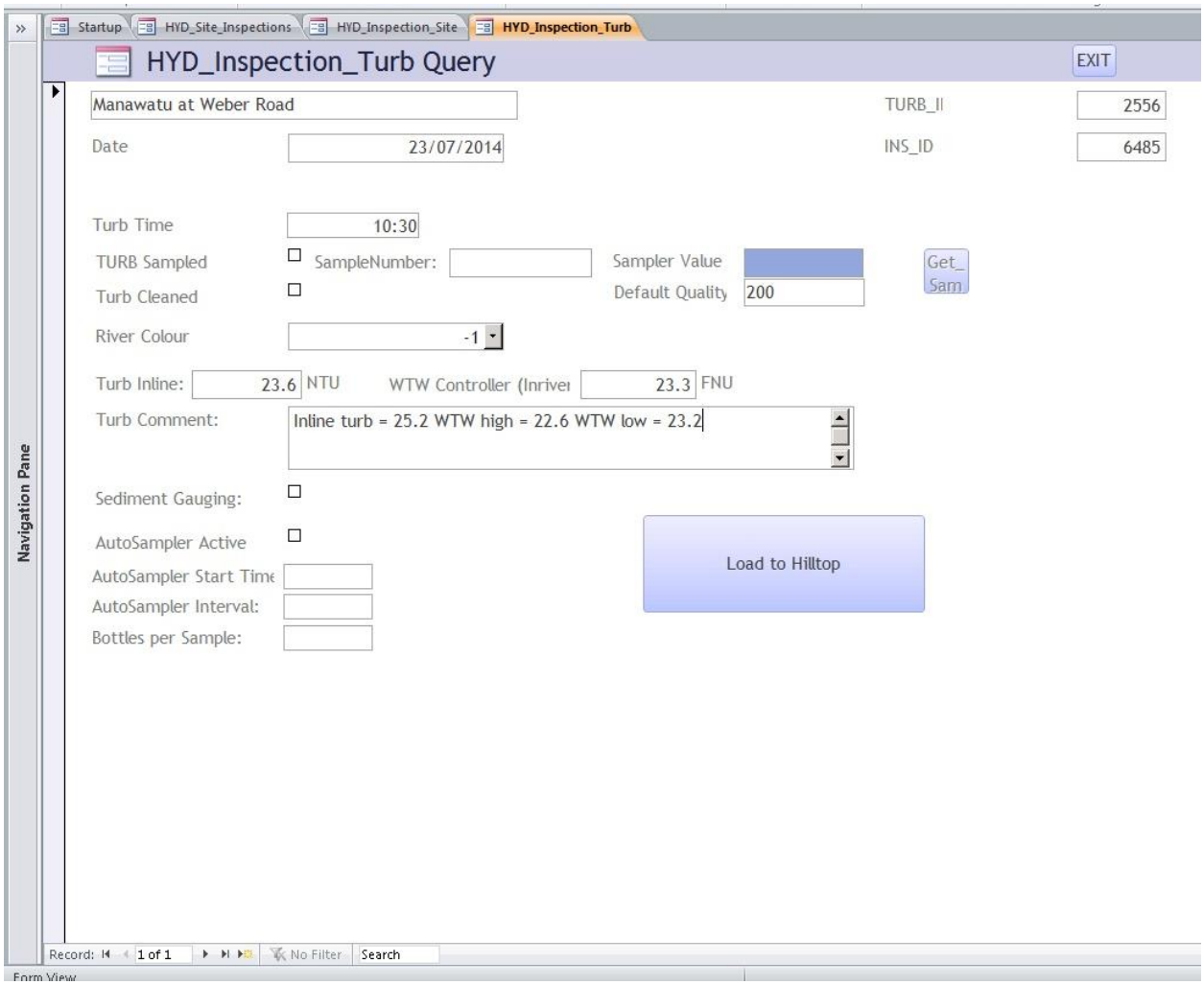
Turbidity Sampled: YES / NO Sensors Cleaned: YES / NO Discoloured / Clear

Inline Turbidity: 25.2 (23.6) NTU WTW High: 22.6 FNU WTW Low: 23.2 (23.3) FNU

Greenspan High: _____ NTU Greenspan Low: _____ NTU Turbidity: _____

	Red Light <1000 LAB ISO Turbidity (FNU)	Red Light >1000 LAB ISO Turbidity (NTU)	White Light <1000 LAB EPA Turbidity (NTU)	LAB Sediment (mg/L)	
				SS	SSC
River Sample No:					
Pump Sample No:					

Field Inspection Chit with Information circled in red for Turbidity Inspection to be entered; Green circled information to be entered into the comments section

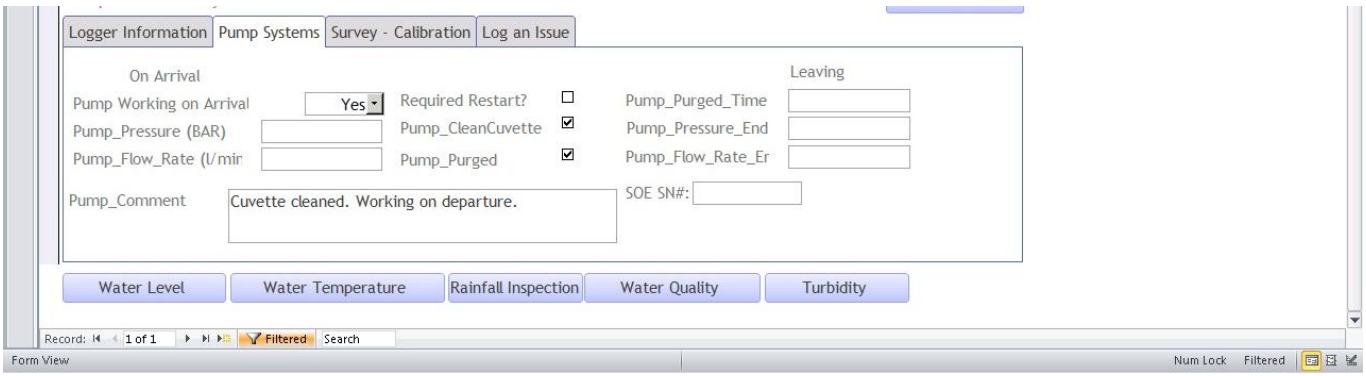


Logsheet Loader Turbidity Inspection competed

Pump Inspection:

1. Where a site has a pump select the 'Pump Systems' tab at the bottom of the main Logsheet Loader page for the Site Inspection
2. Select from the dropdown menu if the pump was working on arrival
3. Tick the 'Pump_CleanCuvette' and 'Pump_Purged' boxes if the pump cuvette was cleaned and/or purged
4. If the Pump Pressure and Flow rate is written on the chit type these into 'Pump_Pressure_End' and 'Pump_Flow_Rate' boxes respectively in the 'Leaving' Section unless they specifically state they are the values on arrival, in which case they should be typed into the 'On Arrival' section
5. In the 'Pump_Comment' box record anything regarding the pump operating/not operating at the site recorded on the chit. This includes but is not limited to: **Pump condition** (working/not working on arrival/departure, turned on/off, blocked, working slow etc.) and whether it is **working/not working on departure**.

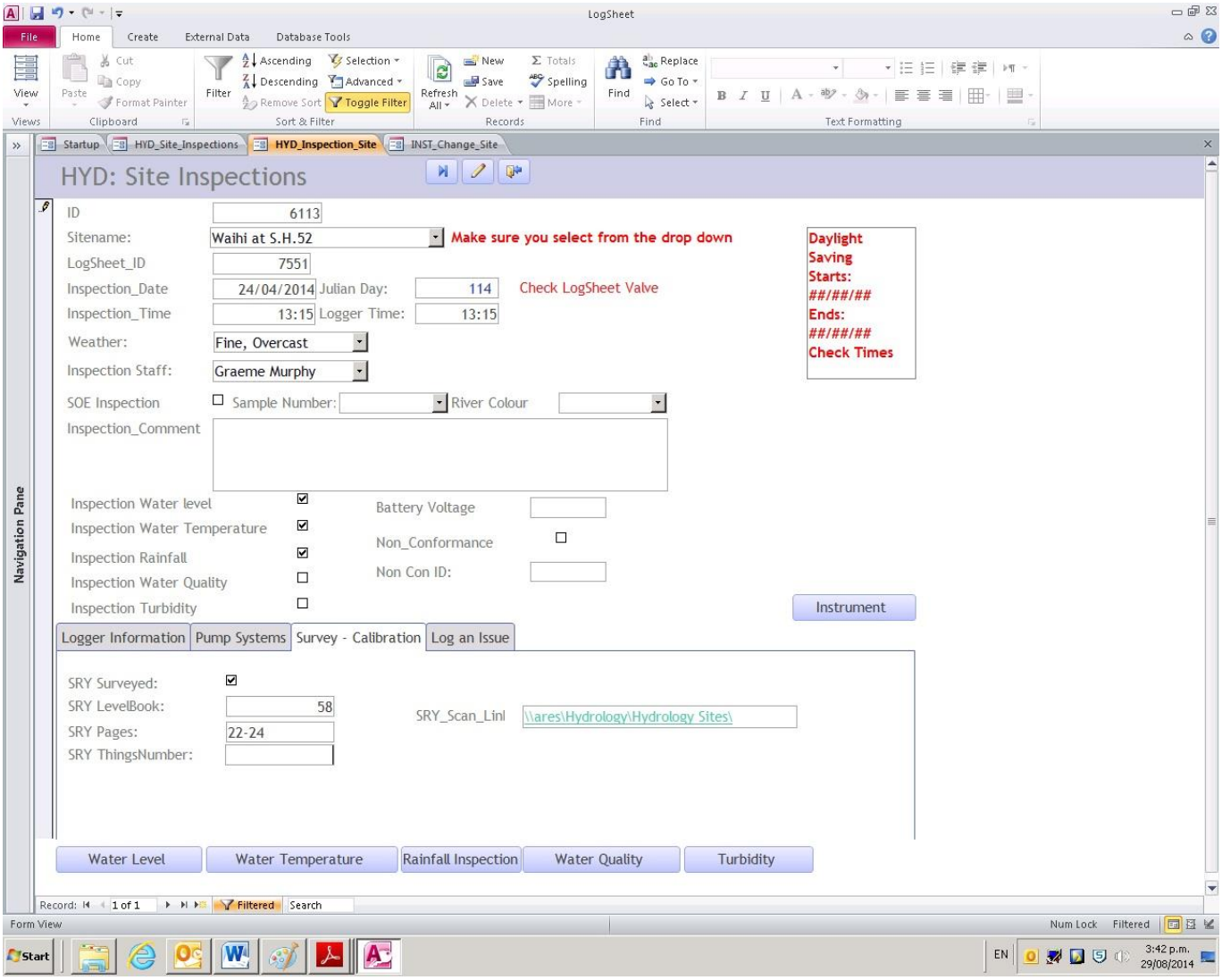
Field Inspection Chit with Information for Logsheet Loader Pump Inspection to be entered



Logsheet Loader Inspection for Pump completed

Survey Inspection:

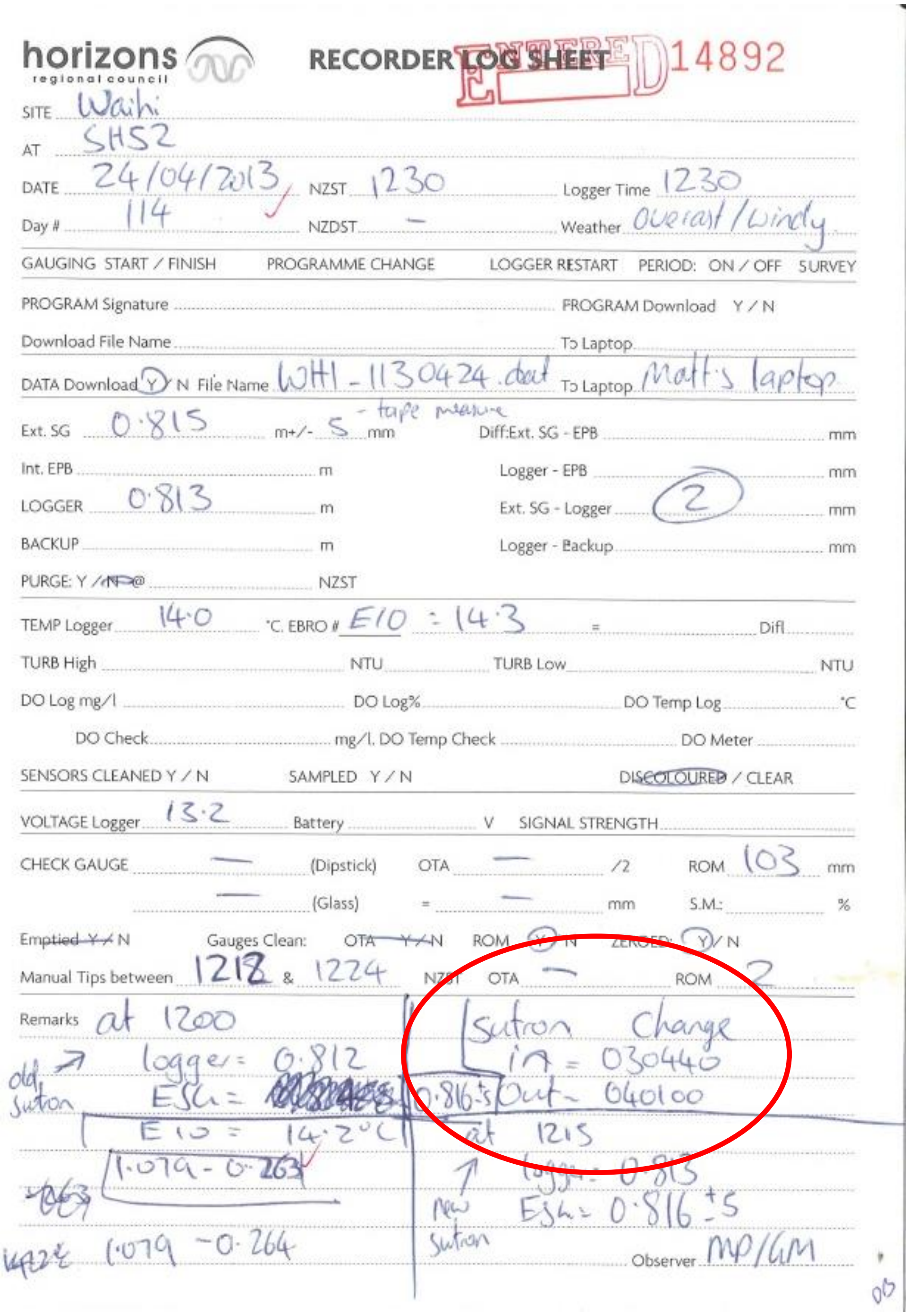
1. Click the 'Survey – Calibration' tab at the bottom of the main Logsheet Loader page for the Site Inspection
2. Tick the 'SRY Surveyed' box if a survey was carried out. This includes if benchmarks were added/re-measured, surveying the ESG, cross sections etc.
3. Type the Level Book number in the 'SRY LevelBook' box – If not recorded on Chit leave blank
4. Type the page number in the above Level Book in the 'SRY Pages' – If not recorded on Chit leave blank



Logsheet Loader Survey Inspection information entered

Instrumentation Change Inspection:

1. Where instrumentation has changed for any data source not only does it need to be noted in the appropriate inspection section within the Logsheet Loader but also in the general 'Instrumentation' Inspection section. This is located to the right on the main Logsheet Loader page for the Site Inspection. Clicking the 'Instrument' button will bring up the Instrumentation Inspection
2. Click the 'New (blank) Record' button in the bottom left hand corner. Unlike other inspection sections all the Instrumentation Inspections that have been done at the site can be viewed in this section by clicking the arrows in the bottom left hand corner.
3. Enter the Sensor that is being removed in the 'INST_OUT_Type' box along with the serial number (if recorded on the Field Inspection Chit) in the 'INST_Out_SerialNumber' box
4. Enter the Sensor that is being installed in the 'INST_In_Type' box along with the serial number (if recorded on the Field Inspection Chit) in the 'INST_n_SerialNumber' box
5. If the change in instrumentation resulted in an offset change (e.g. change of Sutron for recording Stage) tick the 'INST_OffsetChange' box along with entering what the offset was and what it is being changed to (if noted on the chit) in the 'INST_Offsetwas' and 'INST_OffsetNow' boxes respectively.
6. In the 'Comment' section record any information about the change of instrumentation. This includes but is not limited to: **instrumentation range, model and make and what was wrong with instrument**
7. Click the 'Exit' button at the top of the screen when finished – it will automatically save.



horizons regional council RECORDER LOG SHEET ENTERED 14892

SITE Waihi

AT SH52

DATE 24/04/2013 NZST 1230 Logger Time 1230

Day # 114 NZDST — Weather Overcast/Windy

GAUGING START / FINISH PROGRAMME CHANGE LOGGER RESTART PERIOD: ON / OFF SURVEY

PROGRAM Signature PROGRAM Download Y / N

Download File Name To Laptop

DATA Download Y / N File Name WHI-130424.dat To Laptop Matt's laptop

Ext. SG 0.815 m+/- 5 mm - tape measure Diff:Ext. SG - EPB mm

Int. EPB m Logger - EPB mm

LOGGER 0.813 m Ext. SG - Logger 2 mm

BACKUP m Logger - Backup mm

PURGE: Y / N @ NZST

TEMP Logger 14.0 °C EBRO # E10 = 14.3 = Difl

TURB High NTU TURB Low NTU

DO Log mg/l DO Log% DO Temp Log °C

DO Check mg/l. DO Temp Check DO Meter

SENSORS CLEANED Y / N SAMPLED Y / N DISCOLOURED / CLEAR

VOLTAGE Logger 13.2 Battery V SIGNAL STRENGTH

CHECK GAUGE — (Dipstick) OTA — /2 ROM 103 mm

— (Glass) = — mm S.M.: %

Emptied Y / N Gauges Clean: OTA Y / N ROM Y / N ZEROED: Y / N

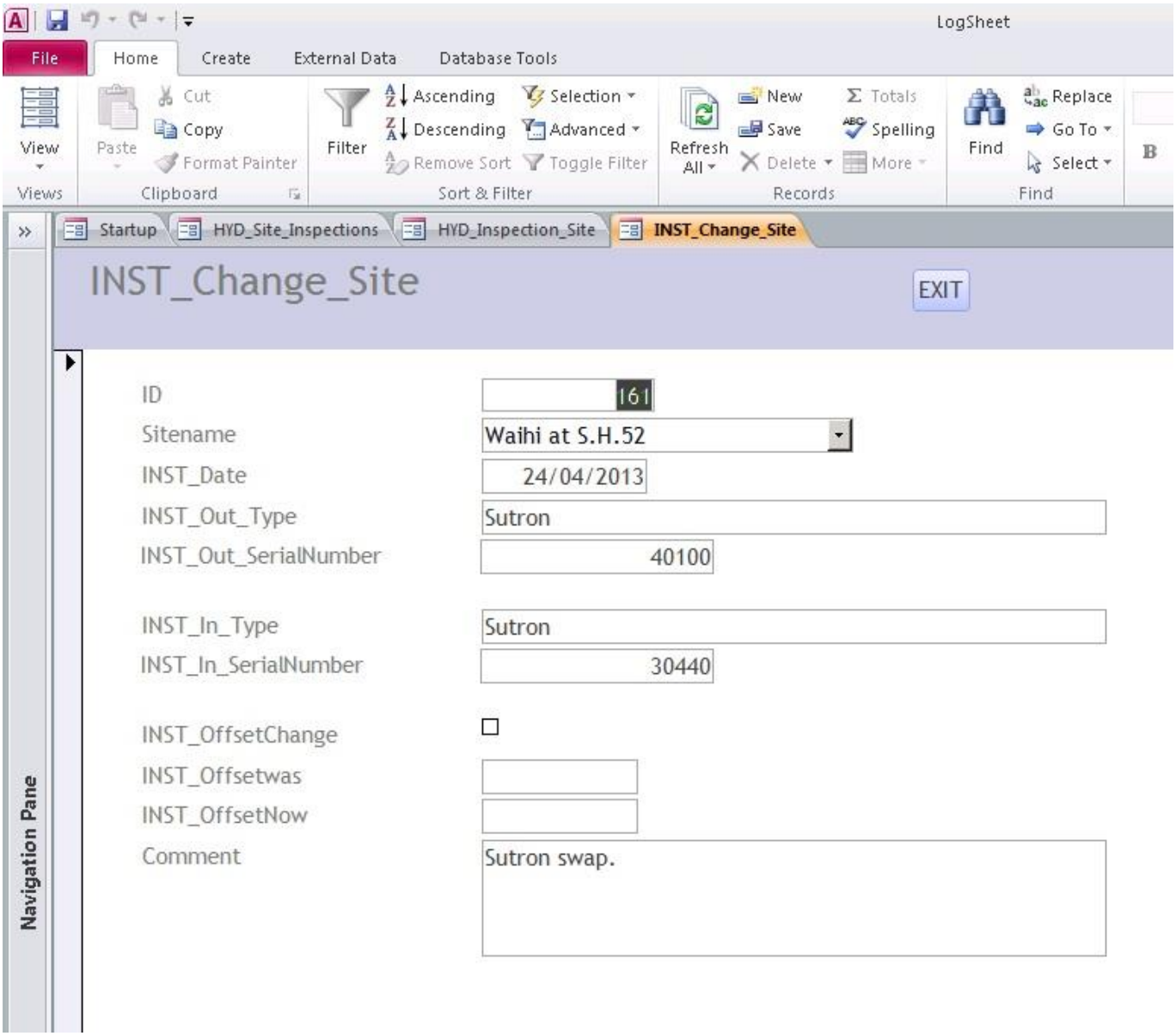
Manual Tips between 1218 & 1224 NZST OTA — ROM 2

Remarks at 1200 logger = 0.812, ESG = 0.816 ±5, E10 = 14.2°C, 1.079 - 0.263; old sutron. Sutron change in = 030440, Out - 040100 at 1215, logger 0.813, ESG = 0.816 ±5 New sutron. 1.079 - 0.264

Observer MP/GM

Field Inspection Chit with Information circled in red for Instrumentation Logsheet Loader Inspection

Logsheet Loader SOP



Logsheet Loader Inspection for Instrumentation completed

Completion:

Once all the information from the Field Inspection Chit has been entered into the appropriate sections in the Logsheet Loader the Chit needs to be stamped to verify it has been entered along with the Julian Day being ticked (if correct). The chit is then filed away in the site drawer.